

AUG 04 2008

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having representations of directed links between service elements, thereby defining representations of higher-level and lower-level service elements, the mapping method being performed on the element graph prior to the status messages being actually transmitted and comprising:

directing a status message to a representation of at least one higher-level service element;

ascertaining, at the representation of the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element;

downwardly propagating of the status message to said lower-level service element in response to a positive outcome [[in]] by said ascertaining step.

2. (Currently amended) The method of claim 1, wherein, before the status message is directed to the representation of the at least one higher-level service element, the status message is analyzed, and representations of attributes are added to the status message related to information contained in the status message, wherein said ascertaining step is performed on the basis of the representations of the attributes associated with added to the status message.

3. (Currently amended) The method of claim 1, wherein at least some of the

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

representations of the service elements are logical service elements.

4. (Currently amended) The method of claim 1, wherein a representation of an edge condition is associated with a link connecting the a representation of at least one higher-level service element with a representation of a lower-level service element, and wherein the representation of the edge condition is tested as part of [[in]] said ascertaining step.

5. (Currently amended) The method of claim 1, wherein a representation of a node condition is associated with a representation of the at least one higher-level service element, and wherein the representation of the node condition is tested [[in]]as part of said ascertaining step.

6. (Currently amended) The method of claim 1, wherein the representations of the lower-level service elements are arranged in more than one hierarchical level, and wherein representations of the actions of ascertaining and downwardly propagating are repeatedly carried out downwardly from level to level.

7. (Currently amended) The method of claim 6, wherein, [[in]]as part of said ascertaining step, for a representation of a service element on a higher hierarchical-level, at least one condition is tested for each representation of a service element on a lower hierarchical-level connected with the service element on the higher hierarchical-level, and wherein the downward propagation of the status message is terminated if no condition for propagating the status message to a representation of a service element on the lower hierarchical-level is fulfilled.

8. (Currently amended) The method of claim 1, wherein the element graph is able to be extended by adding representations of further service elements without a necessity to adapt adapting the status messages of the representation of the monitored objects to the representation of the service elements added.

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

9. (Currently amended) A method of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining representations of higher-level and lower-level service elements, the method being performed on the element graph prior to the status messages being actually transmitted and comprising:

analyzing a status message of a monitored object, and adding representations of attributes to the status message, the added representations of attributes being related to information contained in the status message;

directing the status message to a representation of at least one higher-level service element;

ascertaining, at the representation of the higher-level service element, on the basis of at least one of the representations of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element;

downwardly propagating of the status message to the representation of said lower-level service element in response to a positive outcome [[in]] by said ascertaining step.

10. (Currently amended) The method of claim 9, wherein at least some of the representations of the service elements are logical service elements.

11. (Currently amended) The method of claim 9, wherein a representation of an edge condition is associated with a representation of a link connecting the at least one higher-level service element with a lower-level service element, and wherein[[, in]] said ascertaining, it is tested step includes testing, using a representation of at least one of the attributes, whether the representation of the edge condition is fulfilled.

12. (Currently amended) The method of claim 9, wherein a representation of a node condition is associated with the representation of the at least one higher-level

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

service element, and wherein[[, in]] said ascertaining, ~~it is tested~~ step includes testing, using the representation of at least one of the attributes, whether the representation of the node condition is fulfilled.

13. (Currently amended) The method of claim 9, wherein the representations of lower-level service elements are arranged in more than one hierarchical level, and wherein representations of the actions of ascertaining and downwardly propagating are repeatedly carried out downwardly from level to level.

14. (Currently amended) The method of claim 13, wherein[[, in]] said ascertaining[[,]] step includes: for a representation of a service element on a higher hierarchical-level, testing a representation of at least one condition ~~is tested~~ for each service element on a lower hierarchical-level connected with the service element on the higher hierarchical-level, and wherein the downward propagation of the status message is terminated if no condition for propagating the status message to a representation of a service element on the lower hierarchical-level is fulfilled.

15. (Currently amended) The method of claim 9, wherein the element graph is ~~able to be extended by adding~~ representations of further service elements without a ~~necessity to adapt~~ adapting the status messages of the representations of the monitored objects to the representations of the service elements added.

16. (Currently amended) An IT-infrastructure-management server arranged to map status messages of monitored objects of the IT infrastructure to service elements, the server including an element graph which are represented in the server in an element graph ~~having~~ representations of directed links connecting representations of service elements, thereby defining representations of higher-level and lower-level service elements, the server being programmed to cause the element graph to perform plural operations and then transmit the status messages, the plural operations including:

directing a status message to a representation of at least one higher-level service

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

element;

ascertaining, at the representation of the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element;

propagate propagating downwardly the status message to the representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.

17. (Currently amended) An IT-infrastructure-management server arranged to map status messages of monitored objects of the IT infrastructure to service elements,

which are represented in the server including [[in]] an element graph having representations of directed links connecting representations of service elements, thereby defining representations of higher-level and lower-level service elements, the server being programmed to cause the element graph to perform plural operations and then transmit the status messages, the plural operations including:

analyze analyzing a status message of a monitored object, and add representations of attributes to the status message, the added representations of attributes being related to information contained in the status message,

directing the status message to a representation of at least one higher-level service element;

ascertaining, at the representation of the higher-level service element, on the basis of a representation of at least one of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element;

propagate propagating downwardly the status message to the representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.

18. (Currently amended) A computer program product comprising a machine-readable medium with program code stored on it, for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having representations of directed links between representations of service elements, thereby defining representations of higher-level and lower-level service elements, the program code being arranged to be performed before transmission of the mapping status messages to the service elements and causing the computer system to cause the element graph to:

direct a status message to a representation of at least one higher-level service element;

ascertain, at the representation of the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element;

downwardly propagating the status message to a representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.

19. (Currently amended) A computer program product comprising a machine-readable medium with program code stored on it, for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having representations of directed links between service elements, thereby defining representations of higher-level and lower-level service elements, the program code being arranged to be performed before transmission of the mapping status messages to the service elements and causing the computer system to cause the element graph to:

analyze a status message of a monitored object, and add representations of attributes to the status message related to information contained in the status message,

direct the status message to a representation of at least one higher-level service element;

ascertain, at a representation of the higher-level service element, on the basis of the representation of at least one of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element;

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

propagate downwardly the status message to a representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.

20. (Currently amended) A propagated method of propagating a signal carried on an electromagnetic waveform, the method comprising representing a representation of program code for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having representations of directed links between representations of service elements, thereby defining representations of higher-level and lower-level service elements, the program code being arranged to be performed before transmission of the mapping status messages to the service elements and causing the computer system to cause the element graph to:

direct a status message to a representation of at least one higher-level service element;

ascertain, at the representation of the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element;

downwardly propagating the status message to the representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.

21. (Currently amended) A propagated Apparatus for transmitting a signal carried on an electromagnetic waveform, comprising a representation source of program code for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining representations of higher-level and lower-level service elements, the program code being arranged to be performed before transmission of the mapping status messages to the service elements and causing the computer system to cause the element graph to:

Application No.: 10/806,431Docket No.: 200207452-1 (1509-495)

analyze a status message of a monitored object, and add representations of attributes to the status message, the added representations being related to information contained in the status message,

direct the status message to a representation of at least one higher-level service element;

ascertain, at the representation of the higher-level service element, on the basis of at least one of the represented attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element;

propagate downwardly the status message to a representation of said lower-level service element in response to a positive outcome [[in]] of said ascertaining step.